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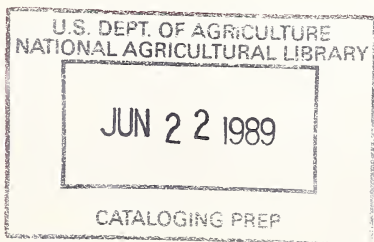
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U.S. Department of Agriculture
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by Bees ad

How To Avoid Them, What To Do
When You Can't



People working in areas where honey bees live can't avoid them entirely. But knowing how they behave and what to do when you do run into them can help prevent painful, sometimes deadly encounters.

Tropical Honey Bees

Honey bees are potentially dangerous. Most kinds of bees will sting, but some kinds of honey bees are especially likely to. These honey bees live mostly in tropical and subtropical areas of Africa, the Middle East, Asia, and Central and South America. They are more likely to attack than the European domesticated honey bees found in the United States, and they are more easily provoked.

So far, stinging bees aren't a special problem for people working in the rural United States. But this could change. One type of sting-prone bee is found in Central and South America. This is the Africanized honey bee. In the past 30 years, these bees have spread steadily northward into southern Mexico and toward the United States. U.S. and Mexican scientists are working together to stall further advance of this bee and to find ways to make it less dangerous.

Bee Sting Allergies

A single bee sting can kill a person who is allergic to bee venom. Multiple stings are more likely to trigger a fatal allergic reaction, and the accumulated poison from several hundred or more stings could kill anyone. This is why people should be especially careful around bees that are easily excited. They need less provocation than the European honey bee to sting people and will sometimes inflict thousands of stings on a single person or animal.

Allergy tests can identify most people who are sensitive to bee stings and are subject to life-threatening anaphylactic shock (physiological shock brought about by hypersensitivity to an allergen). Such persons should carry prescription sting-kits, be knowledgeable in their use, and be especially cautious to avoid all bee stings. People planning to live, work, or travel in places where sting-prone honey bees are common should be tested for such allergies. No one should assume that lack of other types of allergies guarantees that he or she is not allergic to bee venom.

People should also keep in mind that sensitivity to allergens can develop over time, so a lack of reaction in the past doesn't guarantee safety in the future. The best protection is to take precautions against being stung.

Defensive Behavior of Bees

Bees tend not to sting while gathering nectar and pollen from flowers.

Bees from established nests can be dangerous. Although some nests can be approached and even disturbed without eliciting a defensive response, at other times, the same colonies can attack you before you get within 150 yards. To be safe, assume that all nests are dangerous.

Bees nest in many places. Some nests are in cavities—hollow trees and abandoned tires, for example. But others are in exposed locations with the combs hanging from branches, cliffs, eaves of houses, dense clumps of brush, and so on. The exposed nests are the most dangerous because an envelope of thousands of bees can cover the combs; when disturbed, hundreds, even thousands, can launch an attack within seconds. Cavity nests usually have restricted entrances, and you have more time (5 seconds) to retreat.

Four features of their defensive behavior make tropical bees more dangerous than the European honey bees North Americans are familiar with:

They are nervous and less hesitant to sting than European bees.

They attack in large numbers—sometimes in the thousands.

They persist in attacking for long periods—sometimes hours.

They will follow people and animals up to 3 kilometers (about 2 miles) from the colony, and they apparently even follow odor trails if they lose visual contact.

Steps To Avoid Serious Injury

Never approach an occupied nest, and do not disturb swarms.

Remain aware of the honey bee threat just as you are conscious of the threat of poisonous snakes. This means never climb or shake a tree, kick a tree stump, roll a log, or turn a large rock without first looking to see if foraging honey bees are entering and exiting.

Always keep an escape route in mind. You can run away from stinging honey bees. As you run, perhaps half a

mile, you will gradually leave the attacking bees behind you. Never crawl or climb into a precarious position where you cannot make a quick exit. Most serious injuries to people and livestock are inflicted on victims who are trapped, penned, caged, or incapacitated.

What To Do if You're Attacked

If you're attacked, you should try to run away from the bees. Do not stand in one place and slap at attacking bees; movement is attractive to them. Never "take cover" because the bees will maintain their attack and continually recruit more attackers by releasing alarm pheromones as they sting. Bees attack quickly and tend to direct their stinging at your head. Stings in the scalp are annoying, but stings received around the nose, ears, eyes, and mouth can be disorienting and cause you to stumble and fall. So as you run, try to cover your nose and eyes (without blocking your vision). Without missing a step, throw whatever protection you can over your head—such as a shirt or similar garment. Don't worry if you have a few bees under your cover because a few stings are not a threat unless you're allergic.

Keep running until you're clear of bees. Then seek first aid as soon as possible.

What To Do if Someone Else Is Attacked

If you see someone being attacked by honey bees, chances are that they are being stung and that you will be shortly. The attacked victim should be running, and you should start running too. Try to steer a steady course away from the area of the attack and shout at the victim to follow your lead.

Keep your eye on the victim in case he or she falls or gets trapped. This is the most dangerous situation. Remember that a trapped or immobilized victim needs your help, but a faulty rescue attempt will only endanger your life or the lives of others.

To attempt a rescue of a fallen or trapped victim, you will need two things—something to protect yourself and something to protect the victim. Protecting the victim against further stings may save his or her life, so remove the victim from the area as quickly as possible. If you can't remove the victim, cover him or her to prevent further stings (clothes, blankets, leaves, and so on). Honey bees will stop the attack and return to their colony at dark.

Steps To Take After An Attack

Nonallergic persons who receive fewer than 15-25 stings don't usually require medical treatment other than first aid for pain and local swelling. However, stings near the throat may cause local swelling that disturbs breathing, and medical treatment may be required.

Don't try to remove stingers with tweezers or your fingers; you might inadvertently squeeze more venom into your body. Cut stingers off or scrape them off with your fingernails. Most important, remove them quickly and seek medical attention if appropriate.

Allergic persons should seek medical supervision and advice even after the emergency use of sting kits.

All persons who receive more than 15-25 stings should seek medical supervision. Systemic reactions (affecting one or more of the body's systems) may occur. Self-monitoring of your physiological response to bee stings is difficult, unreliable, and dangerous. You will likely see and feel the body's local response at the site of the bee sting. But a more serious systemic response may not be readily apparent. And responses that seem systemic may not be. If you suspect a systemic reaction, be calm, you may be incorrect. Temporary decreases or increases in blood pressure (accompanied by fainting) frequently follow stinging and often give the impression of systemic responses. Don't pretend you're a doctor; find someone who can help you get to an area where you can get medical attention.

If hundreds of stings are received, hemolysis (destruction of red blood cells) and muscle tissue breakdown can lead to kidney stress and even kidney failure up to several days later.

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